

CERTIFICATE OF EXPRESS MAIL

NUMBER EL 831787995 US

DATE OF DEPOSIT : August 31, 2001

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Amey L. Klamon
Signature

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

**David A. Fischhoff,
Roy L. Fuchs,
Paul B. Lavrik,
Sylvia A. McPherson,
Frederick J. Perlak**

Prior application

Serial No.: 09/027, 998

Examiner: A. Nelson

Group Art Unit: 1638

Serial No.: Unassigned

Filed: August 31, 2001

For: **COLEOPTERAN TOXIN PROTEINS OF
BACILLUS THURINGIENSIS (Amended)**

Atty. Dkt. No.: 11899.0195.DVUS01

Box Patent Application
Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Prior to examining this application, please amend the application as follows:

IN THE SPECIFICATION:

At page 1, line 1, please delete the existing title and replace with

-- **Coleopteran toxin proteins of *Bacillus thuringiensis***--

At page 1, line 2 please insert a new paragraph:

--This application is a division of pending application Serial No. 09/027,998 filed February 23, 1998, now U.S. Patent 6,284,949, which is a continuation of application Serial No. 08/759,446

filed December 5, 1996, now U.S. Patent 5,763,241, which is a continuation of application Serial No. 08/435,101 filed May 4, 1995, which is a divisional of application Serial No. 08/072,281 filed June 4, 1993, now U.S. Patent 5,495,071, which is a continuation of application Serial No. 07/523,284 filed May 14, 1990, which is a continuation of 07/044,081 filed April 29, 1987, the entire contents of all are hereby incorporated by reference.--

IN THE CLAIMS:

Please cancel claims 1-36, 39, and 43-52, without prejudice.

Please add the following new claims:

- 53. A toxin protein according to SEQ ID NO:2, comprising a deletion consisting of the removal of one or more amino acid residues from the N-terminal 76 amino acids.
54. A toxin protein of claim 53, wherein the deletion comprises the removal of at least a single amino acid residue from the N-terminal 76 amino acids.
55. A toxin protein of claim 53, in which the deletion comprises the N-terminal 15 amino acids.
56. A toxin protein of claim 53, in which the deletion comprises the N-terminal 48 amino acids.
57. A toxin protein of claim 53, in which the deletion comprises the N-terminal 57 amino acids.
58. A toxin protein of claim 53, in which the deletion comprises the N-terminal 76 amino acids.
59. A toxin protein of SEQ ID NO:2 comprising a deletion of the N-terminal 47 amino acids, and further comprising a substitution of threonine to aspartic acid at amino acid residue 49.

60. A toxin protein of SEQ ID NO:2 comprising a substitution of methionine to isoleucine at amino acid residue 48. --

REMARKS

The specification has been amended to recite the current history of this divisional application as well as to have a title reflective of the claimed subject matter.

With this amendment there are now 13 claims pending, namely claims 37-38, 40-42, and 53-60. The newly added claims are commensurate with the original claims and support for them can be found on page 43 of the Specification as well as in Figures 9 and 10. For the Examiner's convenience, a list of currently pending claims is attached hereto.

The Commissioner is authorized to charge the filing fee and claims fee to Deposit Account No. 01-2508/11899.0195.DVUS01. Should any additional fees be required for any reason relating to the enclosed materials, the Commissioner is authorized to deduct said fees from Deposit Account No. 01-2508/11899.0195.DVUS01.

Respectfully submitted,



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MONSANTO TECHNOLOGY LLC

Date: August 31, 2001

Pending Claims

37. A toxin protein having the amino acid sequence (1-644) shown in Figure 10.
38. A toxin protein of Claim 37 in which the N-terminal 15 amino acids have been removed.
40. A toxin protein of Claim 37 in which the N-terminal 48 amino acids have been removed.
41. A toxin protein of Claim 37 in which the N-terminal 57 amino acids have been removed.
42. A toxin protein of Claim 37 in which the N-terminal 76 amino acids have been removed.
53. (New) A toxin protein according to SEQ ID NO:2, comprising a deletion consisting of one or more amino acid residues from the N-terminal 76 amino acids.
54. (New) A toxin protein of claim 53, wherein the deletion comprises the removal of at least a single amino acid residue from the N-terminal 76 amino acids.
55. (New) A toxin protein of claim 53, in which the deletion comprises the N-terminal 15 amino acids.
56. (New) A toxin protein of claim 53, in which the deletion comprises the N-terminal 48 amino acids.
57. (New) A toxin protein of claim 53, in which the deletion comprises the N-terminal 57 amino acids.

58. (New) A toxin protein of claim 53, in which the deletion comprises the N-terminal 76 amino acids.
59. (New) A toxin protein of SEQ ID NO:2 comprising a deletion of the N-terminal 47 amino acids, and further comprising a substitution of threonine to aspartic acid at amino acid residue 49.
60. (New) A toxin protein of SEQ ID NO:2 comprising a substitution of methionine to isoleucine at amino acid residue 48.

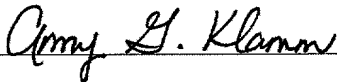
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(MOBT:195--1)

SUBMISSION OF FORMAL DRAWINGS

BOX: PATENT APPLICATION

Commissioner for Patents
Washington, D.C. 20231

Sir:

In connection with filing a divisional application under 37 C.F.R. § 1.53(b) of co-pending prior application Serial No. 09/027,998 filed February 23, 1998, Applicant hereby submits formal drawings (Figures 1 through 18 comprising 33 sheets) for the above-referenced application.

Respectfully submitted,



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